HOW ELECTRICITY OPERATES IN THE KITCHEN.

Cooking Utensils and Paraphernalis-Frying, Baking, Broiling and Heating by Electricity-Enormous Waste in the Use of Old Style Fuel.

No Dirt or Ashes.

For some time past electricity has less than when coal is used.



m: S. C. silicate cement S. W. specially drawn copper wires. SECTION AND BOTTOM OF KETTLE.

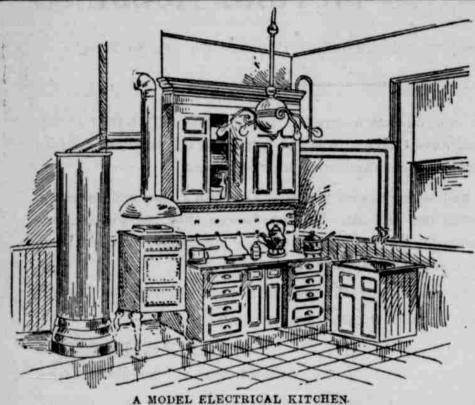
been used in a limited way by the demonstrators at various "food show" cooking schools. It required the World's Fair to bring the subject before the public in all its prominence.

The workings of the electric cur- heat.

and in one minute it is hot, and its heat is all on the under side. It remains at an even temperature all it is necessary to regulate the amount day, and one iron is all that is required. The cost of running an iron at the right temperature. The reguelectric iron may be attached to an ordinary incandescent lamp socket by removing the globe and screwing the iron wire in place. The oven may be run for five cents an hour and the broller for the same figure. The oven heat may be graduated by means of a wires-that is, wires which are not switch. Pans and pots can be run at | good conductors, and which offer re-The application of electricity to about the same cost. The fact that sistance to the passage of the electriaffairs domestic is a subject that de-mands the attention of all mankind. of cooking makes the cost somewhat

There are a number of kitchens in practical use in New York and Brooklyn, says a New York paper, and the most desirable results are obtained.

An Electrical Kitchen. In the kitchens of these houses the coal stove has no place; and the gas-jet for lighting or heating is unknown. All cooking and water-heating is done by the electrical current, which the cook switches on from the wires in the kitchen wall as she requires it. Against the wall stands a table, or rather a small bureau, fitted with drawers and doors, and with a top of solid, blue slate. This is the What does electric cooking mean? stove, but it has no direct connection It means the absence of the old-fash- with the heating or cooking. It ioned range and more-no coal! no merely serves as a table on which to smoke! no ashes! It means no build- place the electrical cooking utensils, ing of kitchen fires on hot summer which are all thus highly insulated. mornings; it means the emancipation To the left stands the boiler, in which the water is kept at a gentle



connected with our mercantile and smaller pipe. Run electricity through | cords are made of very fine copper a wire one-quarter inch in diameter, threads twisted together and insulaand it gives no apparent result, but turn this same current into a smaller wire and the result is heat, as shown in the ordinary incandescent lamp. The small wire cannot handle the current fast enough; therefore it gets hot. This is the fact that governs electric cooking. The reader may say, "This is plain so far, but the electric light globe has practically no heat about it." The explanation is this: The wire in the electric light globe is in a vacuum and is on this ted by rubber and cotton. Each cord account surrounded to a certain extent by a non-conductor, hence the heat radiation is very small.

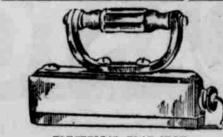
If it were possible to surround a frying pan with a veil of fine wire ing covered with a metal case as



shown by the dark ring on the bottom of the pan in the illustration. button, similar to that on the electric light, the pan is heated almost as quickly as the explanation is made. The broiler, oven, coffee pot, tea kettle and hot water tank are all operated in the same manner.

The advantages of using electricity are so great and so numerous that it would be impossible to convey the facts on paper. Suffice it to say that there is none of the disagreeable dust or heat, no smoke nor danger of fire. In the ordinary stove the heat generated is 100 per cent. Of this heat 80 per cent. goes up the chimney, 15 per cent. warms the air in the room and incidentally the cook; the remaining 5 per cent. is all that can be used for cooking. With the new of the cord has two small plugs appliances nearly all the heat is These she pushes into receptacles in

rentare less understood by the gen- | On the same side, on an iron stand, eral public than any other subject is the electric oven, divided into sevartments, the domestic life. The current may be which is the plate-warmer. Pipes are likened to running water, and with led from the boiler to the sink fauthis idea one has the best illustra- cets on the other side of the bureau. tion. If water be run through a pipe Hung over a hook in the wall two inches in diameter, into a small- are a number of twisted cords. er pipe, say one inch in diameter, with a glass screw-plug at one end the result attained is pressure in the and a push-plug at the other. These



ELECTRICAL FLAT IRON.

has two strands, each of which is a conductor, one for the negative and one for the positive. In early days these were distinguished by making red hot stove with a glass case and them of different colors, but this to pump all the air from the case, practice has been abandoned since the heat would not be felt to any it was discovered that it did not great degree. Imagine an ordinary matter which course the current took. Upon other hooks, or shelves, are the beneath it, this wire surrounded with | cooking utensils-teapots, coffee-pots, a packing which would retain and saucepans, frying-pans, water-kettles, convey the heat, the wire and pack- stew-pans, etc. An entire outfit is there, and each utensil is within easy reach of the cook. There is also ranged on the shelves a series of flatfrons. Above the table, or bureau, are a number of receptacles to receive the screw-plugs, which are attached to the ends of the cords, and above each is a small switch, of which all that can be seen is a small projecting key similar to that used in the gas-cocks of chandeliers.

The mode of operation is extremely simple, and the densest greenhorn could familiarize herself with it in less than five minutes. If an order comes to the kitchen for some coffee, Mary takes down the coffee-pot, The pan with the electrical arrange- charges it with the fragrant berry ment does not differ from the ordi- and the due amount of water, and nary pan, except for the fact that it stands it upon the slate bureau top. is slightly heavier and has a wire at- She then unbooks one of the cords tached. By connecting this wire and screws the glass plug into its rewith the socket board and turning a ceptacle on the wall; the other end



utilized in cooking, and the radiation the base of the pot, and turns the similar to the rubber tree, and often is scarcely perceptible; hence the switch. In a few minutes the water is boiling, and in a few more the This yields a liquid very much like For example, take the flat iron. stimulating liquid ascends to the Ironing day in summer it dreaded by all who have to do with it. By using the electric iron the work seems a pleasure compared with the old way.

The iron is attached to the socket, stimulating liquid ascends to the epicures upstairs. The process is just as simple for all the other utensils. All are operated in the same way. Nothing could be simpler and nothing in the cooking way cleaner. Truth.

milk in taste and appearance."

"Is if true that Stuyvesant has entered the world of letters?" "Yes; he's defendant in a breach of promise case."—Truth.

The process of stewing, however, requires different conditions. Here is about two cents per hour. The lation is effected by wiring the circuits in a special manner, so that the various necessary temperatures can be obtained.

Perfection in the system was not obtained without much thought and considerable experiment. Resistance



cal current and become heated in the process-were first wrapped in asbestos. This was too crude, and the wires were then imbedded in enamel. Here the fun began. Enamel after enamel was tried, but almost as soon as the current was turned onto the wires, crack would go the enamel, and the task had to be renewed. Finally an enamel of silicate, or, rather, a cement, was discovered, and electric-cooking became a fact. Its application to the utensil may be seen from the illustration.

Electric Ovens and Utensils. with several circuits, placed at the top or sides. It is divided into several compartments, each of which can be supplied with heat at a different temperature, so that meat may be cooking in the lower and the plates kept mildly warm in the upper. The oven is air-jacketed and has bright interior surfaces, so that all the heat is retained. A small incandescent lamp suspended in the interior permits of the cook watching the cooking process through a small window of thick, transparent mica;

These ovens, when heated for a quarter of an hour, carry on most | ty-four footmen followed. cooking operations without further heating. They act like bakers' ovens, where the fire is applied for a certain time and then raked out, after which the oven has to carry on the baking for the rest of the day with the heat contained in itself. These ovens will, probably, be brought into more common use by the companies supplying current, which will push their use as the gas companies are pushing the gas stoves.

The electric griddle is just an iron plate, upon the bottom of which are set the wires in a bed of enamel; and apper of during the World's Fair a skillful colored cook was kept pretty busy during the day turning out buckwheat and griddle cakes to an admiring throng, composed mostly of women. The gridiron is perhaps the only kitchen utensil which cannot be directly heated. But an electric fire to grill things over is obtained by running the bare wires closely together in and out over a small asbestos mat. As soon as the current is switched on the wires become incandescent, and a strong heat is thrown upward toward the meat or fish set over it on the gridiron. The fumes are carried off up a special chimney.

The rapid adaptation of electricity to the heating of flatirons and the general work of a laundry is proved by a case in England, where a large building, formerly a flourmill, was turned into a steam laundry. The old mill waterwheel was turned to account in driving an eighty-light dynamo, and not only is the whole building lighted by electricity, but all the linen is smoothed and glossed by the electrically heated irons. The outlay was small; the satisfaction complete.

Electricity is an excellent servant, and it is slowly being trained to new duties. Its uses are manifold, and its benefits innumerable. The only obstacle to its general use for house-hold purpose is the high price of selecting several pasobstacle to its general use for houseboth utensils and current. The utensils are undergoing a process of cheapening, and we may shortly see electrical cooking and heating a matter of as everyday occurrence as the gas stove.

How a Rubber Forest Looks.

According to recent accounts of the reckless manner in which forests of rubber trees are destroyed, india-rubber will soon be much more scarce and costly than it now is, and when that happens it is probable that somebody will invent a substitute. At present, however, it is interesting to know what a recent traveler says of the india-rubber forests of Nicaragua.

"A forest of them may be detected without the eyes of an expert, for they are scored and dying from the wounds of the machete, the big knife ased by the natives. The ordinary specimen of Nicaragua is from fifty to one hundred feet high, and about two feet in diameter.

"The bark is white and the leaves oval, with a slight inclination downwards. The cuts are made about two | that day meetings can be held in leadfeet apart, and usually extend from the ing cities where labor troubles are ground to the first branch, channels being scored in the sides to lead the being scored in the sides to lead the juice into a bag. The average yield is said, were concluded for seven thouof a tree is from five to seven gallons

tion. After this operation the crude rubber is baled up and shipped north rubber is baled up and shipped north to be refined and further prepared for commerce. Another tree, very similar to the rubber tree, and often that city, Redstone will meet it with the unemployed of Washington and vicinity and escort it to the Capitol. When these pilgrims have surrounded the Capitol with a hollow square, they mistaken for it, is the cow-tree. milk in taste and appearance."

COXEY ON THE MARCH

STARTS FROM MASSILLON, OHIO, WITH ABOUT 150 MEN.

The Crusade Against the National Capital Begun Under Discouraging Circumstances-Crowds of Spectators Line the Roads-Scenes in Camp at Canton.

"Commonweal" Sets Forth. Coxey's army of the commonweal left Massillon, Ohio, Sunday forenoon, and by night had covered the first eight miles of the long heralde i march to Washington. A Canton, Ohio, dispatch says that as the column passed through the public square of the city of its birth there were just 122 peop'e on foot, in wagons, or horseback. The national colors were carried at the head of the column by Sam Johncon, a Massillon negro. Carl Browne came next, mounted on a splendid white horse weighing nearly 2, 0) pounds. He wore high top boots, corduroy trousers, a buckskin jacket, a fur

overcoat, and a big sombrero. Doc Kirkland, of Pittsburg, was close behind

speaker's platform, was rext. It is to peach crop whatever, this freeze hav-accommodate Carle Browne and his ing finished the ruin which the Janupanorar a idustrating his harangus against the national banking system as the monster of the age.

In a fill shed the rain which the said ary co'd snap be fan.

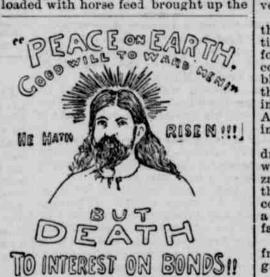
Cairo, Ill.—The temperature here has fallen several degrees below freez-

J. S. COXEY.

as the monster of the age.

Lew Smith, the great unknown, headed the ection of footmen. He is the man who made such an incendiary speech in Massillon that he was not allowed to speak the second time. People in the crowd the first time he spoke thought he was Fielden, the Chicago anarchist, and so announced. He replied: "I am the great unknown and must remain so." He is hands me, commanding and well dressed and maintains good discipline. Seventry four footmen followed.

A covered wagon accompanied the band of fourteen members. Two wag-ons accompanied the tents and a commissary, and an ordinary farm wagon loaded with horse feed brought up the



PANNER CARRIED BY COXEY'S MEN.

rear. The first stop was made at Reedurban, and here, according to the scriptural idea which Browne introduces wherever possible, there was a feast of loaves and fishes-rye bread, canned salmon, and oiled sardines. After an hour's rest the order to fall in was given. There were some recruits by this time—a dozen more horsemen—and probably 150 marched through the city and to Camp Lexing-ton, just outside the city, where the night was spent. Marshal Browne says that the name, age, residence and occupation of every member is enrolled, together with a satisfactory reason for enlisting. The list was not open to public gare, but Frowne indignantly denies that there is a single tramp in the company. He says that others will join in camp all along the route.

Coxey is elated with the start and

says a grand success is now assured. Before leaving Camp Concord at Massillon, a meeting was held. Carl Browne delivered his idea of a sermon. He read sages from Reve'ation. He took the ground that all of the

prophecies had been fulfilled. He ex-CARL BROWNE p'ained the passage of the beast with seven heads and ten horns. New York, he said, was the beast, the seven heads inancial conspiracles, and the ten horns such grasping, grinding monopo ies as the Standard Oil Trust, the railroad trusts, and

the land trust .. Purpose of the March. J. S. Coxey's "army" of unemployed was organized to march to Washington and in person demand relief from Congress. Mr. Coxey associated with him as assistant Carle Browne, of California. The work of organization California. The work of organization Weman's Health Protective Associfarmers' alliances and similar or-ganizations were invited to join intact. All organizations were advised to pro-cure a wagon, if possible, to carry amp utensils. Appeals to Populists and various societies throughout the country were malled at inte vals for several months.

The itinerary of the trip is an interesting one. It has been so arranged abundant. It is from the e centers Mr. Coxey expects to secure the greatest sand acres of land in Washington, of milky fluid.

"This is mixed with the juice of the wisth,' which hastens congelation. After this operation the crude of the agent. When the army reaches that city, Redstone will meet it with will separate into groups according to their Congressional districts, and will call upon their Representatives to come out. They will be jetitioned to

tent sixty feet in diameter, used by

tent sixty feet in diameter, used by a circus last year, two smaller tents, 24 by 40 feet in size, a commissary wagon of six or eight tons capacity, an ambulance wagon, with medical and surgical appliances and numerous smaller articles for the accommodation of the army. The big circus tent is to be used for sleeping quarters at night, and for the meetings en route, when the weather is too inclement for the open air.

Congress will be demanded to pass two bills. One provides for the issuing of \$500,000,000 in legal tender notes, to be expended by the Secretary of War at the rate of \$20,000,000 a month in at the rate of \$20,000,000 a month in constructing roals in the various States. Comm n labor is to be paid \$1.50 a day for eight hours work. Another bill is to provide that any State or municipality down to a village desiring to make public improvements may deposit with the Secretary of the Treasury non interest bearing bonds not exceeding one-half the assessed valuation of its property upon which the Secretary of the Treasury shall issue legal tender at 98 per cent, of their face value. Jerry Simpson will be asked to introduce these Ells.

FATAL TO THE FRUITS.

Country Visited by Freezing Cold-Drop of Fifty Degrees.

According to the press dispatches the recent cold snap has been fatal to with two aids. Then the fruits. Throughout Illinois, Indicame Coxey in his ana, Iowa and Michigan the tempera-

phaeton, with a coachman driving a spirited team. Mrs.
Coxey, her little son Legal Tender, and her sister, Miss ana, lowa and Michigan the temperature has been unusually low for this season.

At Anna, Ill., the thermometer fell to about 20 deg ces. The frost did great damage to fruit and vegetables through ut the section. The buds of Jones, drove with the pears, cherries and early apples them to the first are thought to be killed. Strawberries Electric ovens are usually provided stop. A light running gear, having a are injured some, and there will be no

> ing. The damage to fruit growers and gardeners in this vicinity will reach many thousand dollars.

> Mascoutah, Ill.-In two days there has been a drop in the temperature of from fifteen to eighteen degrees. Peaches, pears and plums are ruined.
> Detroit, Mich.—Dispatches from various sections of Michigan report the

> temperature at far below the freezing point everywhere. The thermometer registers 10 degrees at Sault Ste. Marie, 12 at Alpena, 16 at Grand Haven and 20 in Detroit. The cold wave in Michigan is accompanied by northwest winds and light snow in some portions. Fruit-growers will suffer almost universally.

St. Louis, Mo.—The freezing weather that now prevails throughout this section of the Southwest is unprecedented for the mon h of March, and is causing consternation among fruit and vegetable growers, who will be heavy losers therefrom. Ice an inch thick formed in this city, and as far south as San Angelo, Tex., it was a quarter of an inch thick.

Muncie, Ind.—The temperature has

dropped thirty degrees, and Muncie was visited by one of the severest blizzards of the season. One grower says that all the fruit in this section of the county has been killed, which will be a loss of thou ands of dollars to farmers.

Wabash, Ind.—It is believed the fruit is all killed. Wheat which had grown rank is also injured. Valparaiso, Ind.-Wheat is thought to have been killed.

Burlington, Ia. - Easter Sunday will be memorable as the coldest in the memory of the oldest inhabitant. The mercury was near zerc. Many flowers with which the churches were decorated were frosted during the night.

Fruit buds suffered severely.

Buffalo, Wy.—Last week's blizzard, continuing seventy hours, has never been approached in severity by any other storm in this locality. Traffic is entirely suspended, and communication by wire with the outside world has only just been restored. Snow is drift-ed from ten to twenty feet deep in ev-ery direction. The loss of stock is ter ible.

St. Paul, Minn.-The temperature reached the vicinity of six degrees below zero, which was the lowest record for the month.

DENOUNCE BRECKINRIDGE.

Social Purity League of New York Wants Congress to Expel H m.

The fourth annual business meeting and election of officers of the National Christian I eague for the Protection of Social Purity was held in New York at the headquarters of the league, 33 East 22d street. One cause of the long continuance of the meeting was the animated discu sion concerning Congressman Breckinridge, in which the ladies became involved. They finally decided to send a memorial to Congress prote ting against allowing Congressman Breckin idge to retain his seat. They also decided to send a communication to Mrs. Breckinridge calling upon her in the name of womanhood to renounce her husband and to refuse to live with him longer. In addition to this they voted to call upon the presbytery with wh c'i Col. Breck-

Overflow of News.

Two children were killed by the caving in of a dugout home at Enid,

MRS. JOHN JOHNSON and her son were killed by lightning at Lawrenceville, Ga. GEORGE DRAPER, President of the

Cincinnati Common Council, is violently insane. JOSEPH LEUVENMARK, champion high diver of the world, died at San

TELEGRAPHERS had their inning before the conference to sett'e Union Pa-cific labor troubles. Enginemen will

MRS. CORNELIA A. SPINDLER, a widow at Defiance, Ohio, has sued Brice M. Alshouse for \$5,000 for breach of promise.

EASTERN roads have announced rate of a cent a mile for the Grand Army encampment in Pittsburg in

HENRY McDonald, in all at Chattafeed the army during its stay.

An inspection of Coxey's headquarters before the march began disclosed, in readiness for the march, a round ram against the brick walls of the jail.

Of medicinal agents is gradually relegat-ing the old-time herbs, pills, draughts and vegetable extracts to the rear and bringing into general use the pleasant and effective liquid laxative, Syrup of Figs. To get the true remedy see that it is manufactured by the California Fig Syrup Co. only. For sale by all leading druggists.

A Strange Suit.

An Oklahoma merchant carelessly An Oklahoma merchant carelessly allowed a few castor beans to get mixed with his oats. He probably thought nothing of it at the time, and sold the oats to a stable-keeper. Several of the horses to which the grain was fed sickened and died. Veterinary surgeons said it was the result of eating the castor beans. The stable-keeper sued for damages and the careless grain dealers were compelled, by order grain dealers were compelled, by order of the court, to pay \$550.

FOR THROAT DISEASES, COUGHS, COLDS, etc., effectual relief is found in the use of "Brown's Bronchial Troches." Price 25 cta. Sold only in boxes.

"Dressed."

Aunt Maria—And how were the la-dies dressed, Carrie? Carrie—Why, aunt, I'm astonished! Ladies are gowned, not dressed. The word "dressed" is only used in good society in reference to food.—Boston Transcript.

"Twinkle, twinkle, little star." you are indeed beautiful, but not half so lovely as the bloom on the cheeks of all young ladies who use Glenn's Sulphur Soap.

FITS,—All Fits stopped free by Dr. Kline's Gre Nerve flestorer. No Fits after first day's use, M velous cures. Treatise and £200 trial bottle free Fit cases. Bend to Dr. Kline, 331 Arch St., Phila.



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And It Will Cure You-Health, Sleep and Appetite Restored.

*C. I. Hood & Co., Lowell, Mass.: "Gentlemen-When we moved here to Illinois a few years ago, my wife and I were in very poor health, all broken down and debilitated. We felt as though we could not live long. My wife weighed but 95 pounds and I only weighed 1:3. We gained in health and strength from the time we began to take Hood's Sarsaparilla, and to-day my wife weighs 145 and I 179 pounds. We are both in good flesh and

Have good appetites, sleep well at night, and feel well generally. We think we owe our lives to Hood's Sarsaparilla, and cheerfully recommend it to anyone. We are never without this

Hood's spraine Cures

best on earth. We say to others, have faith in Hood's and it will oure you." V. C. HEDGES, Hoopeston, Illinois. Get HOOD'S.

Hood's Pills act easily, yet promptly and efficiently, on the liver and bowels. 25c.



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It has more than three times the strength of Cocoa mixed with Starch, Arrowroot or Sugar, and is far more economical, costing less than one cent a cup.

It is delicious, nourishing, and EASLE

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